

REMARKS

I. Status of the Claims

Claims 1, 4, 11 and 12 are now present in this application. Claim 1 is independent.

Claim 1 has been amended for clarity. No new matter has been added. Reconsideration of this application, as amended, is respectfully requested.

II. Issues Under 35 U.S.C. § 103(a)

Claims 1, 4 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee et al. (WO 03/087447); and Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Understanding Textiles by Tortora et al. These rejections are respectfully traversed.

Regarding the Lee reference (WO 03/087447), the Examiner has stated that:

"Lee teaches a composite yarn made of an effect yarn and a core yarn which is used as the warp and/or weft of a woven fabric. Therefore, the composite yarn can be present in both the warp and weft of the woven fabric. Therefore, the warp contains the effect yarn as properly construed by Applicant which has a monofilament fineness of 0.001 to 0.3."

In order to further distinguish the present invention from the cited references, Applicants have amended claim 1 to clarify that both the warp and weft are made from false twist yarns.

Lee discloses an ATY yarn consisting of two-component composite yarn (effect yarn) and a thermoplastic multifilament yarn (core yarn). At page 20, lines 1-2, Lee states,

"ATY with different shrinkage of the present invention is used as a warp and/or weft..."

That is, none of any disclosure of Lee discloses that the effect yarn itself can be used as a warp and/or weft. In other words, the present invention excludes the core yarn of Lee with the transitional phrase "consisting of."

Lee discloses the effect yarn as one component of the ATY yarn. Thus, each of the effect yarn and the core yarn cannot be equated with the warp and/or weft yarn. Lee clearly discloses the ATY yarn consisting of the effect yarn and the core yarn is used as a warp and/or weft yarn.

In this respect, Applicants believe that the ATY yarn of Lee is different from the present warp and weft yarn in terms of construction as follows:

TABLE

	The Present Cleansing Polyester Fabric	Lee's textured yarn (ATY)
Construction	<u>As warp yarn</u> A false twist yarn consisting of polyester multifilament consisting of ultra fine yarns of 0.001 to 0.1 deniers	<u>As warp and/or weft yarn: (1)+(2)</u> <u>(1) effect yarn</u> two-component composite yarn having a monofilament fineness of 0.001 to 0.3 and being air-textured. such effect yarn can be a false-twisted yarn (page 12, lines 18-23 of Lee); and
	<u>As weft yarn</u> false twisted yarn consisting of the polyester multifilament consisting of ultra yarns of 0.001 to 0.1 deniers, and high shrinkage polyester multifilament	<u>(2) core yarn</u> thermoplastic polyester multifilament yarn having a monofilament fineness of 1-8 denier and being air-textured. The effect yarn is twisted around the core yarn to form a textured yarn (ATY).
	The present fabric comprises the weft and the warp yarns, which yarns are produced by a false twist method.	(1)(2) yarns are produced by air-texturizing process.

As seen from the above, the present warp yarn uses a polyester multifilament consisting of ultra fine yarns of 0.001 to 0.1 deniers or its false twist yarn and the present weft yarn uses a false twisted yarn consisting of the polyester multifilament consisting of ultra yarns of 0.001 to 0.1 denier. However, Lee's warp or weft yarn consist of the effect yarn having 0.001 to 0.3 **and the core yarn** having 1-8 denier. Therefore, the present invention which excludes the core yarn of Lee is distinct from Lee.

There is a distinction in the twisting of the yarns. The core yarn of Lee is twisted, because the yarn is made through air texturing and twisting (referred to as "twining" in Lee), which is distinct from the present invention which includes a warp and weft yarn that is false-twisted.

In the fabric field, it is well known that a yarn made by false twisting has no twisted point. As evidence of this fact, Applicants respectfully draw the Examiner's attention to the website of <http://www.polyspintex.com/ups/text04.htm>. This website teaches that the false twist is formed by the release of the twisting point, at which time all the twist disappears. Therefore, there is no twist point in the warp and weft yarn of the present invention after being false twisted. Accordingly, it is apparent that a false twisted warp and weft yarn (of the present invention) and a real twist yarn (Lee's ATY) are distinguishable from each other.

In this respect, as discussed above, the twisted point of the fabric of Lee is formed when one effect yarn is "twined around" another core yarn by way of air texturing process. For example, Lee teaches such a configuration in disclosures at page 5, line 23-page 6, line 6, page 7, lines 3-8, lines 17-25, and page 17, lines 15-25 of Lee. Thus, it is clear that ATY of Lee is manufactured without false-twisting and provides a twisted point (twined point). Also, such an ATY will damage the surface of the object to be cleaned and will have a low cleansing effect in view of the twisted point in the warp and weft. However, the cleansing polyester fabric of the present invention has improved cleansing effects and does not damage the surface of cleaned object because there is no twisted point in the warp and weft of the fabric. As such, significant patentable distinctions exist between the present invention and the teachings of Lee.

Furthermore, as seen from the above table, the present fabric is distinct from the fabric of Lee, because the core yarn of Lee has a fineness of 1-8 deniers (page 8, line 21 to page 9, line 5), whereas the fineness of the inventive weft yarn is 0.001-0.1 denier. In fact, Lee teaches away from using a core yarn having lower than 1 denier. At page 8, lines 21-23, Lee states: "If the monofilament fineness of the thermoplastic multifilament yarn(core yarn) is lower than 1 denier, the drape property of woven or knitted fabrics is reduced." As such, the artisan would be reluctant to use a weft yarn having 0.001-0.1 denier, as presently claimed based on the teachings of Lee.

Lastly, the deficiencies of Lee cannot be cured by Tortora, since Tortora also fails to disclose or suggest the claimed features described above.

In view of the above remarks and amendment, Applicants believe the pending application is in condition for allowance. Reconsideration and withdrawal of the rejections are respectfully requested.

III. Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.


In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, PhD, Registration No. 43,575 at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: February 22, 2011

Respectfully submitted,

By 
James T. Eller, Jr.
Registration No.: 39538
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road, Suite 100 East
P.O. Box 747
Falls Church, VA 22040-0747
703-205-8000

GARTH M. DAHLEN
USPTO #43,575